

REMARKS

Claims 1-43 are pending in the present application. Claim 3 was amended.
Reconsideration of the claims is respectfully requested.

I. 35 U.S.C. § 112, Second Paragraph, Claim 3

The examiner has rejected claim 3 of the current invention under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter, which Applicant regards as the invention. This rejection is respectfully traversed.

With regard to claim 3, the Examiner stated:

The claim "parameters similar to parameters" is not clear to Examiner, are they similar to parameters themselves or similar to other parameters?

(Office Action, dated August 10, 2004, page 2).

Amended dependent claim 3 of Applicant's invention reads as follows:

3. The method of claim 2, wherein the table lookup includes finding one or more previously handled content request entries in a table that have parameters similar to parameters included in the content request.

In other words, the parameters of previously handled content requests that are located in a table are compared with the parameters of the current content request in order to generate a first time estimate of an amount of time to retrieve or prepare requested content in a content source device. Also, Claim 3 has been amended to help clarify Examiner's perceived ambiguity of the claimed invention. Therefore, Applicant respectfully requests the withdrawal of the rejection of claim 3 under 35 U.S.C. § 112, second paragraph.

II. 35 U.S.C. § 103, Obviousness, Claims 1-43

The examiner has rejected claims 1-43 under 35 U.S.C. § 103 as being unpatentable over Hatakeyama (U.S. Patent No. 6542468) in view of Ording (U.S. Patent No. 2001/0055017). This rejection is respectfully traversed.

The Examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). For an invention to be *prima facie* obvious, the prior art must teach or suggest all claim limitations. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Independent claim 1 of the present invention, which is representative of independent claims 25 and 42, reads as follows:

1. A method of generating an estimate of an amount of time required to complete a content request for content to be transmitted over a network, comprising:

- receiving a first estimate of an amount of time to retrieve or prepare requested content in a content source device;
- generating a second estimate of an amount of time to receive the requested content over a communication link from the content source device;
- generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates;
- generating a graphical representation of the third estimate; and
- outputting the graphical representation on a display device.

A. With regard to claims 1, 25, and 42, the Examiner stated:

Regarding claims 1, 25 and 42, Hatakeyama discloses: a method, a computer program product and an apparatus for generating an estimate of an amount of time required to complete a content request for content to be transmitted over a network, comprising: receiving a first estimate of an amount of time to retrieve or prepare requested content in a content source device (col. 8, lines 60 to col. 9, lines 4 and col. 9, lines 47-54, Hatakeyama);

generating a second estimate of an amount of time to receive the requested content over a communication link from the content source device (col. 5, lines 15-36, Hatakeyama); However, Hatakeyama didn't disclose: generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates; generating a graphical representation of the third estimate; and outputting the graphical representation on a display device. On the other hand,

Ording discloses: generating a third estimate of a total amount of time to complete the content request based on the first and second time estimates (page 3, paragraph 0022, Ording); generating a graphical representation of the third estimate (fig. 2, Ording); and outputting the graphical representation on display device (fig. 2, Ording). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include the steps for estimate of a total amount of time to complete the content request and display the output in the graphical representation device in the system of Hatakeyama as taught by Ording. The motivation being to enable the system provides updates on the progress of the task the percentage which is completed and/or estimated time remaining in the progress bar (page 3, paragraph 0022, Ording).

(*Office Action*, page 3).

Hatakeyama does not teach or suggest the current invention recited in claim 1. Hatakeyama teaches a system, which relates to request and response processes between a transmission source node and a transmission destination node, for autonomously selecting an optimum path by obtaining an actual response time per unit data length and estimating a response time for each path. (*Hatakeyama*, page 1, Abstract). The system comprises estimation individuals to be used for estimating a response time for each of the clients.... (*Id.*). When any of the clients requests a service of any of the servers, the system calculates an estimated response time for each of the paths which can make a data communications with any of the servers by using the estimation individual, selects the path with the minimum estimated response time, and transmits the service request on the selected path. (*Id.*). Therefore, the invention in Hatakeyama is to automatically select the optimum transmission pathway for a content request, from a source node to a destination node, by determining the path with the minimum estimated response time and then transmitting the request over that pathway.

Claim 1 of Applicant's present invention recites a method for generating and graphically representing a third estimate of the total amount of time needed to complete a content request by combining a first estimate of the amount of time required for the source device to retrieve or prepare the requested content with a second estimate of the amount of time necessary to receive the requested content over a communication link. Applicant combined the first and second time estimates to generate the third because there are many cases in which the retrieval and preparation time for the requested content

is a large factor in the overall waiting time of the user. (*Application*, page 13, lines 11-14). Many times, dynamically created content, such as Web pages and files, are bound to operationally intensive processes running on backend servers. The time needed to perform these operationally intensive processes significantly impacts the time required to fulfill a content request from a client device. (*Id.*, page 2, lines 1-6). Therefore, the Applicant is endeavoring to solve the problem of generating and graphically representing to the user inaccurate time of completion for a content request that does not account for operationally intensive preparation or retrieval process time of the source device.

Consequently, the Hatakeyama reference does not teach Applicant's current invention recited in claim 1 because Hatakeyama teaches a method for determining only one minimum response time estimate for the sole purpose of ascertaining the optimum transmission path. In other words, the Hatakeyama invention determines the optimum transmission pathway for a content request by estimating the shortest response time and then automatically transmitting the requested content over the selected path. Moreover, a graphical representation of the minimum response time estimate is not produced for the user in Hatakeyama. However, the present invention's third total time estimate recited in claim 1 represents the combination of two estimates. The first estimate is the time required by the source device to prepare or retrieve the requested content. The second estimate denotes the time necessary to receive the requested content from the source device. Thus, the third estimate in Applicant's claim 1 is a more accurate depiction of the time required to complete a content request. In contrast, Hatakeyama produces a single minimum response time estimate to determine optimum transmission pathways for requested content. Therefore, Hatakeyama does not teach or suggest the current invention recited in claim 1.

Examiner Nguyen also cites Ording as a prior art reference with regard to claim 1 of the present invention. Ording does not teach or suggest claim 1 of the present invention. Rather, Ording teaches a user interface that provides continuous feedback regarding a function or task being performed by a computer's operating system. This feedback is provided by means of an interface element that changes size and/or shape as portions of the task are completed, such as a progress bar. (*Ording*, page 1, paragraph 0007). When a task is initiated, such as a copying or downloading operation, two threads

are launched. One thread performs the actual copying operation itself, and provides updates on the progress of the task, e.g. the percentage which is completed and/or the estimated time remaining. The second thread controls the display of the status indicator, and receives the updates from the first thread to change the length of the progress bar accordingly. (*Id.*, page 3, paragraph 0022). Therefore, Ording teaches that the status dialogue window displays to the user the various indicators of the progress of the task being performed, such as the number of files remaining to be operated on, the time remaining, and the percentage of the task completed. (*Id.*, paragraph 0027).

As previously stated above, claim 1 of the present invention recites a method for generating and graphically representing a third estimate of the total amount of time needed to complete a content request by combining a first estimate of the amount of time required for the source device to **retrieve or prepare the requested content** with a second estimate of the amount of time necessary to receive the requested content over a communication link. Even though Ording teaches a progress bar that depicts the estimated time required to receive a content request over a network, it does not include in its estimate the estimated time required for the source device to retrieve or prepare the requested content for transmission as recited in claim 1's first time estimate. The time estimate provided to the user graphically in Ording is only analogous to the second time estimate recited in claim 1 of the current invention, which is the amount of time necessary to receive the requested content over a network and does not account for the first time estimate of retrieval or preparation by the server. Therefore, Ording does not teach or suggest the present invention recited in claim 1. Ording is an example of the problem the Applicant is trying to correct because current progress bars do not account for backend processing and preparation of the data to be downloaded. As a result, known progress bars are less accurate and provide a false indication to the user of the estimated time of completion of the content request. (*Application*, page 2, lines 6-11).

Additionally, even if Hatakeyama and Ording could be properly combined, the combination of the two references would not form the presently claimed invention. Hatakeyama teaches an apparatus and method for autonomously selecting an optimum transmission pathway for a content request. (*Hatakeyama*, col. 4, lines 52-60). Furthermore, Ording simply teaches a graphical representation of an operating system's

task performance and the progress of the task's completion. (*Ording*, page 1, paragraph 0007). As a result, the combination of Hatakeyama and Ording would not produce Applicant's present invention of generating and graphically displaying a third estimate of the total amount of time required to complete a content request by combining a first estimate of the amount of time requisite for the source device to retrieve or prepare the requested content with a second estimate of the amount of time needed to receive the requested content as recited in claim 1. Accordingly, the combination of Hatakeyama and Ording does not teach or suggest the current invention recited in claim 1.

Moreover, for the aforementioned reasons, it would not have been obvious to one of ordinary skill in the art at the time of the present invention to combine the teachings of Hatakeyama and Ording to arrive at Applicant's invention. In determining obviousness, an Applicant's teachings may not be read into the prior art. *Panduit Corp. v. Denton Mfg. Co.*, 810 F.2d 1561, 1575 n. 29, 1 U.S.P.Q. 1593, 1602 n. 29 (Fed. Cir. 1987) (citing need to "guard against hindsight and the temptation to read the inventor's teachings into the prior art"). A determination of the desirability of combining prior art references must be made without the benefit of hindsight afforded by an Applicant's disclosure. *In re Paulsen*, 30 F.3d 1475, 1482, 31 U.S.P.Q. 1671, 1676 (Fed. Cir. 1994).

In view of the above, Applicant submits that independent claims 1, 25, and 42 are not taught or suggested by the combination of Hatakeyama and Ording.

B. With regard to independent claims 19, 36, and 43, the Examiner stated:

Regarding claims 19, 36 and 43, all the limitations of this claim have been noted in the rejection of claim 1, 25 and 42. It is therefore rejected as set forth above. In addition, Hatakeyama/Ording discloses: a method, a computer program product and an apparatus for generating an estimate of an amount of time required to retrieve or prepare requested content, comprising: receiving a request for content, the request including one or more parameters (col. 9, lines 10-30, Hatakeyama); identifying previously completed request information regarding a previously completed request based on the one or more parameters, the information including a time required to retrieve or prepare the content of the previously completed request (col. 10, lines 50-64, Hatakeyama).

(*Office Action*, page 4).

Independent claim 19 of the present invention, which is representative of independent claims 36 and 43, reads as follows:

19. A method of generating an estimate of an amount of time required to retrieve or prepare requested content, comprising:
receiving a request for content, the request including one or more parameters;
identifying previously completed request information regarding a previously completed request based on the one or more parameters, the information including a time required to retrieve or prepare the content of the previously completed request;
generating a time estimate of an amount of time required to retrieve or prepare the requested content based on the previously completed request information;
generating a graphical representation of the time estimate; and
outputting the graphical representation on a display device.

Examiner Nguyen utilizes the same basis of rejection for independent claims 19, 36, and 43, as she does for independent claims 1, 25, and 42 above. Correspondingly, the Section A arguments for claims 1, 25, and 42, are hereby applied to the Examiner rejections of claims 19, 36, and 43. Additionally, even though Hatakeyama teaches a method for receiving a content request and identifying previously completed request information, it does not teach or suggest that the previously completed request information includes data with reference to the amount of time required by the source device to retrieve or prepare the requested content as recited in claim 19 of the present invention.

In Hatakeyama, the previously completed request information is data relating to the transmission of a service request message, which includes at least the path over which the message was transmitted and the request data length of the service request message. (*Hatakeyama*, col. 5, lines 15-19). The transmission information obtained from previously completed content requests is used in the Hatakeyama reference to identify the optimum transmission pathway for currently requested content, whereas claim 19 of the present invention recites that the previously completed request information includes a time required to retrieve or prepare the content of the previously completed request. Therefore, Hatakeyama does not teach or suggest Applicant's current invention as recited in claim 19 because the Hatakeyama invention will neither generate nor graphically

display the time estimate of an amount of time required to retrieve or prepare the requested content based on the previously completed request information.

Although Ording teaches a graphical representation of the estimated time required to receive a content request, the combination of Ording and Hatakeyama will merely produce a graphical display of the estimated optimum transmission path minimal response time for the requested content. In contrast, Applicant's invention recited in claim 19 will produce a graphical representation of the estimated amount of time needed for the backend server to retrieve or prepare the requested content for transmission. As a result, the combination of Hatakeyama and Ording does not teach or suggest the recited present invention of claim 19, which is representative of claims 36 and 43.

Hence, Applicant submits that independent claims 19, 36, and 43 are not taught or suggested by the combination of Hatakeyama and Ording.

C. Claims 2-18, 20-24, 26-35, and 37-41 are dependent claims depending on independent claims 1, 19, 25, and 36, respectively. Applicant has already demonstrated claims 1, 19, 25, 36, 42 and 43 to be in condition for allowance. Applicant respectfully submits that claims 2-18, 20-24, 26-35, and 37-41 are also allowable, at least by virtue of their dependency on allowable claims. In addition, claims 4, 5, 6, 8, 9, 10, 21, 26, 27, 28, 29, and 38 are examples of dependent claims that contain features not taught or suggested by the Hatakeyama or Ording references.

D. With regard to method claims 4 and 21, and computer program product claim 38, the Examiner stated:

Regarding claims 4, 21 and 38, all the limitations of these claims have been noted in the rejection of claims 2, 19 and 36. In addition, Hatakeyama/Ording discloses: wherein the table lookup includes identifying an estimate of a minimum, maximum and average amount of time to retrieve or prepare the requested content (col. 11, line 60 to col. 12, line 30, Hatakeyama).

(Office Action, page 4).

Dependent claim 4 of the present invention, which is representative of dependent claims 21 and 38, reads as follows:

4. The method of claim 2, wherein the table lookup includes identifying an estimate of a minimum, maximum and average amount of time to retrieve or prepare the requested content.

Hatakeyama does not teach or suggest that the table lookup includes identifying an estimate of a minimum, maximum and average amount of time to retrieve or prepare the requested content as recited in claim 4 of Applicant's invention. As argued in Section A above, the Hatakeyama invention does not teach the estimation of the time required to **retrieve or prepare the requested content** by the source device. Consequently, Hatakeyama cannot teach or suggest the estimation of the minimum, maximum and average times for **retrieval and preparation of the requested content** recited in claim 4 of the current invention.

Moreover, Hatakeyama teaches that upon receipt of the request, the estimation information managing unit searches an estimation individual table and an actual response time table and transmits the necessary records to the path calculating unit. (*Hatakeyama*, col. 10, lines 59-63). The record of each estimation individual in the estimation individual table includes an identification number, an address location, the degree of fitness, and a lifespan.... (*Hatakeyama*, col. 11, lines 5-10). The degree of fitness is a degree for determining how accurately the response time of a service request that the client group issues to the service providing server group can be estimated. (*Id.*, lines 16-19). If the actual response time matches the estimated response time at each measurement time, the degree of fitness becomes "1," which is the highest. (*Id.*, lines 48-50). The closer the degree of fitness of an estimation individual is to "1," the more superior it is. (*Id.*, lines 57-59). If the degree of fitness of an estimation individual is the minimum value in a school, the value of the lifespan of the estimation individual will become "0." The closer the degree of fitness of an estimation individual is to the maximum value in a school, the larger the value of the lifespan of the estimation individual. That is, the value of the lifespan of the estimation individual becomes larger

as the degree of fitness of the estimation individual gets closer to "1." The estimation individual is deleted as the one whose lifespan expires.... (*Id.*, col. 12, lines 10-20).

Therefore, the reference to minimum and maximum in Hatakeyama refers to the fitness and lifespan of an estimation individual in the table. The estimation individuals in the table are used to determine the optimum transmission pathway with the minimum response time for a current content request. Thus, the recited claim 4 table lookup of the present invention, which includes identifying an estimate of a minimum, maximum and average amount of time to **retrieve or prepare the requested content**, is distinguishable from determining the minimum and maximum fitness and lifespan of an estimation individual in a table for the specific purpose of ascertaining the minimum response time transmission path for the requested content as taught in Hatakeyama. As a result, Hatakeyama does not teach or suggest Applicant's invention recited in dependent claim 4, which is representative of dependent claims 21 and 38, in the current invention.

E. With regard to method claim 5, the Examiner stated:

Regarding claim 5, all the limitations of this claim have been noted in the rejection of claim 1. In addition, Hatakeyama/Ording discloses: wherein the first estimate is generated based on information identifying the processes used to retrieve or prepare the requested content (col. 10, lines 51-64, Hatakeyama).

Dependent claim 5 of the current invention reads as follows:

5. The method of claim 1, wherein the first estimate is generated based on information identifying the processes used to retrieve or prepare the requested content.

Once again, Hatakeyama teaches a method for autonomously selecting an optimum transmission path for requested content by establishing a minimum response time estimate. Hatakeyama does not teach a method for generating and graphically representing a third estimate of the total amount of time needed to complete a content request by combining a **first estimate of the amount of time required for the source device to retrieve or prepare the requested content** with a second estimate of the amount of time necessary to receive the requested content over a communication link as

recited in claim 1. (See Section A argument above). Therefore, since Hatakeyama does not teach the estimation of the amount of time required for the source device to retrieve or prepare the requested content, it also will not teach the identification of the processes involved with retrieval and preparation of the requested content as recited in claim 5 of the present invention. Thus, Hatakeyama does not teach or suggest Applicant's current invention recited in claim 5.

F. With regard to method claim 6, the Examiner stated:

Regarding claim 6, all the limitations of this claim have been noted in the rejection of claim 5. In addition, Hatakeyama/Ording discloses: wherein the information includes at least one of an identifier of a program to be used to retrieve or prepare the requested content (col. 11, lines 5-24, Hatakeyama), a typical execution time for the program (col. 9, lines 47-54, Hatakeyama), a number of lines of code in the program (col. 9, lines 47-54, Hatakeyama), and a number of lines of code per second handled by a processor of the content source device (page 3, paragraphs 0026-0027, Ording).

Dependent claim 6 of the current invention reads as follows:

6. The method of claim 5, wherein the information includes at least one of an identifier of a program to be used to retrieve or prepare the requested content, a typical execution time for the program, a number of lines of code in the program, and a number of lines of code per second handled by a processor of the content source device.

If claim 5 of Applicant's present invention is not taught by Hatakeyama (See Section C argument above), then Hatakeyama cannot teach the identification of the program utilized to retrieve or prepare the requested content as recited in claim 6 of the current invention. Consequently, Hatakeyama does not teach or suggest claim 6 of the present invention. In addition, even though Ording teaches the graphical display of the estimated time required to receive a content request over a network, it does not include the estimated time required for the source device to retrieve or prepare the requested content for transmission as recited in claim 1. (See Section A argument above). As a result, the combination of Hatakeyama and Ording will not teach or suggest the current invention as recited in claim 6.

G. With regard to method claim 8 and computer program product claim 27, the Examiner stated:

Regarding claims 8 and 27, all the limitations of this claim have been noted in the rejection of claims 1 and 25 above, respectively. In addition, Hatakeyama/Ording discloses: wherein the third estimate includes a minimum estimated time of completion, a maximum estimated time of completion and an average time of completion for the content request (col. 11, lines 60 to col. 12, lines 30, Hatakeyama).

Dependent claim 8 of the present invention, which is representative of dependent claim 27, reads as follows:

8. The method of claim 1, wherein the third estimate includes a minimum estimated time of completion, a maximum estimated time of completion and an average time of completion for the content request.

The Examiner utilizes the same basis of rejection for dependent claim 8 as she does for independent claims 1 and 25. Accordingly, the Section A arguments for claims 1 and 25 are hereby applied to the Examiner's rejection of claims 8 and 27. As stated in Section A, Hatakeyama does not teach a third total time estimate which includes a first estimate of the time required to retrieve or prepare the requested content and a second estimate of the time needed to receive the content request as recited in claim 1.

Additionally, the claim 4 argument in Section C above explains why Hatakeyama does not teach a minimum, maximum, and average time estimation. As stated in Section C, Hatakeyama teaches a minimum and maximum estimation individual fitness and lifespan in a table for ascertaining the optimum transmission path for currently requested content. Therefore, Hatakeyama cannot teach or suggest the third estimate includes a minimum estimated time of completion, a maximum estimated time of completion and average time of completion for the content request as recited in claim 8, which is representative of claim 27 of Applicant's current invention.

H. With regard to method claim 9 and computer program product claim 28, the Examiner stated:

Regarding claims 9 and 28, all the limitations of these claims have been noted in the rejection of claims 8 and 27 above, respectively. In addition, Hatakeyama/Ording discloses: wherein the graphical representation includes an indicator for each of the minimum estimated time of completion, maximum estimated time of completion and average time of completion for the content request (page3, paragraph 0022, Ording).

Dependent claim 9 of the current invention, which is representative of dependent claim 28, reads as follows:

9. The method of claim 8, wherein the graphical representation includes an indicator for each of the minimum estimated time of completion, maximum estimated time of completion and average time of completion for the content request.

Ording does not teach the graphical display of the minimum, maximum and average time estimated for the completion of a content request as recited in claim 9 of the present invention. Instead, Ording teaches a method for graphically representing the various indicators of the progress of the task being performed by the computer's operating system such as the number of files remaining to be operated on, the time remaining, and the percentage of the task completed. (*Ording*, paragraph 0027). Consequently, Ording provides the user with only one indicator of the estimated time for completion. (*Id.*, figure 2).

However, claim 9 recites an invention that will graphically represent an indicator for each of the minimum estimated time of completion, a maximum estimated time of completion and average time of completion for the requested content. Moreover, as previously stated in Section A above, Ording's time estimate does not take into consideration the first estimate of the amount of time required by the source device to retrieve or prepare the requested content for transmission as recited in claim 1 of the current invention. Therefore, Ording does not teach or suggest Applicant's present invention recited in claim 9, which is representative of claim 28.

I. With regard to method claim 10 and computer program product claim 29 of the current invention, the Examiner stated:

Regarding claims 10 and 29, all the limitations of these claims have been noted in the rejection of claims 1 and 25 above, respectively. In addition, Hatakeyama/Ording discloses: wherein the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device (items time remaining to be copies fig. 2, Ording).

Dependent claim 10 of Applicant's invention, which is representative of dependent claim 29, reads as follows:

10. The method of claim 1, wherein the graphical representation includes associated text, and wherein the associated text is changed from a first text to a second text when the requested content begins to be received from the content source device.

Ording does not teach that the graphical display includes associated text that changes from a first text to a second text when the requested content is received as recited in claim 10 of the current invention. Alternatively, Ording teaches numerical changes associated with the amount of time remaining and the number of items remaining to be copied. (*Ording*, figure 2). Conversely, Applicant's invention recites in claim 10 a text change (text meaning words, not numbers, in the graphical representation) when the requested content is first received.

Claim 1 of the present invention recites a first estimate of the time required by the source device to retrieve or prepare the requested content and a second estimate of the time needed to receive the requested content over the communication link. Consequently, it is useful to change the text in the display to inform the user of the operations being performed. Thus, the first text in the graphical representation to the user will read, "Retrieving/Preparing Requested Content." Then, when the requested content begins to be received from the source device, the first text will be changed to a second text which reads, "Downloading Content." (*Application*, figures 10 and 11, and page 20, line 31 - page 21, line 1).

Therefore, Ording does not teach textual changes to the graphical display when different operations are being performed as recited in claim 10 but merely numeric changes related to the performance of a single task. As a result, Ording does not teach or suggest Applicant's recited invention in claim 10, which is representative of claim 29.

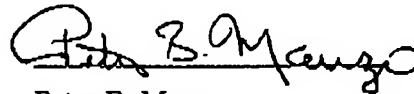
III. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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